

## Touch in primary care consultations: qualitative investigation of doctors' and patients' perceptions

### Abstract

#### Background

Good communication skills are integral to successful doctor–patient relationships. Communication may be verbal or non-verbal, and touch is a significant component, which has received little attention in the primary care literature. Touch may be procedural (part of a clinical task) or expressive (contact unrelated to a procedure/examination).

#### Aim

To explore GPs' and patients' experiences of using touch in consultations.

#### Design and setting

Qualitative study in urban and semi-rural areas of north-west England.

#### Method

Participating GPs recruited registered patients with whom they felt they had an ongoing relationship. Data were collected by semi-structured interviews and subjected to constant comparative qualitative analysis.

#### Results

All participants described the importance of verbal and non-verbal communication in developing relationships. Expressive touch was suggested to improve communication quality by most GPs and all patients. GPs reported a lower threshold for using touch with older patients or those who were bereaved, and with patients of the same sex as themselves. All patient responders felt touch on the hand or forearm was appropriate. GPs described limits to using touch, with some responders rarely using anything other than procedural touch. In contrast, most patient responders believed expressive touch was acceptable, especially in situations of distress. All GP responders feared misinterpretation in their use of touch, but patients were keen that these concerns should not prevent doctors using expressive touch in consultations.

#### Conclusion

Expressive touch improves interactions between GPs and patients. Increased educational emphasis on the conscious use of expressive touch would enhance clinical communication and, hence, perhaps patient wellbeing and care.

#### Keywords

communication skills; consultations; non-verbal communication; primary health care; qualitative research; touch.

### INTRODUCTION

The consultation is the cornerstone of general practice.<sup>1</sup> Over the past 50 years, there has been a shift from the traditional doctor-centred consultation approach to a more patient-centred approach.<sup>2</sup> At the heart of this is the value of developing an ongoing doctor–patient relationship, which is integral to the ideals of contemporary primary care.<sup>3</sup>

The importance of good communication skills and their ability to shape the doctor–patient relationship are well established.<sup>4</sup> Communication training and teaching tools such as the Calgary Cambridge framework<sup>5</sup> are integral components of undergraduate medical curricula and general practice training.<sup>6,7</sup> Although models provide a framework for teaching and learning, throughout undergraduate medical training and continuing into general practice training, emphasis is placed on learning to implement a variety of communication skills in differing situations.<sup>8</sup> Learners are not restricted to the confines of one rigid checklist, but are taught to develop their own consulting style and to adapt or combine elements of different models to suit both clinical context, patients' needs, and clinicians' individual preferences. Within this training, students and GPs are taught how to communicate using verbal and non-verbal techniques, and how to pick up on cues from patients in order to more effectively gather information, show active

listening, and display empathy.

Non-verbal communication influences the interpretation of verbal messages<sup>9</sup> and may affect patient satisfaction and anxiety, adherence to treatment, health service utilisation, and appointment keeping.<sup>10–12</sup> Touch is a significant component of non-verbal communication: a 'silent language'<sup>13</sup> that is essential for human development and wellbeing,<sup>14</sup> bridging both physical and emotional distance between individuals.<sup>15</sup> The General Medical Council expects medical graduates to 'appreciate the significance of non-verbal communication in the medical consultation'.<sup>16</sup>

Although touch is one of the most fundamental forms of human interaction, it has received little focus in the literature, either in the study of the consultation or as a communication tool in primary care. There is a small body of literature in nursing journals reporting both nurses' and patients' perceptions of the use of touch in nurse–patient interactions.<sup>17–19</sup> Touch has been described as either procedural/task orientated (physical contact that occurs while a task is being performed) and expressive (spontaneous contact, which is not required as part of a task or clinical examination).<sup>13,20</sup> The aim of the study reported in this article was to explore the use of touch in primary care consultations from both doctors' and patients' perspectives, focusing particularly on the role of touch in consultations where

**S Cocksedg**, MD, FRCGP, honorary senior lecturer, Manchester Medical School, University of Manchester, Manchester. **B George**, MBChB, F1 doctor, Leicester Royal Infirmary, Leicester.

**S Renwick**, MBChB, F1 doctor, Northern General Hospital, Sheffield. **CA Chew-Graham**, FRCGP, professor of general practice research, Arthritis Research UK Primary Care Centre, Primary Care Sciences, Keele University, Keele.

#### Address for correspondence

Simon Cocksedg, Manchester Medical School,

University of Manchester, Room 1.3101, Stopford Building, Oxford Road, Manchester, M13 9PT.

**E-mail:** [simon.cocksedg@manchester.ac.uk](mailto:simon.cocksedg@manchester.ac.uk)

**Submitted:** 29 July 2012; **Editor's response:** 21 August 2012; **final acceptance:** 10 October 2012.

#### ©British Journal of General Practice

This is the full-length article (published online 25 Feb 2013) of an abridged version published in print. Cite this article as: **Br J Gen Pract** 2013; DOI: 10.3399/bjgp13X665251

## How this fits in

Non-verbal communication influences the interpretation of verbal messages and may affect patient satisfaction and anxiety, adherence to treatment, health service utilisation and appointment keeping. Touch is a significant component of doctor–patient communication, which has received little attention in the primary care literature; it may be procedural (part of a clinical task) or expressive (physical contact unrelated to a procedure). Most doctors and all patients in this study reported that expressive touch improved communication quality. GPs described limits to using expressive touch, but most patient responders believed these fears should not prevent doctors utilising expressive touch. Raising doctors' awareness about the potential for consciously using expressive touch as a communication tool during primary care consultations may help clinicians improve the doctor–patient relationship.

an ongoing doctor–patient relationship had already been established.

## METHOD

### Study design

The study was conducted in north-west England (Greater Manchester and North Derbyshire). GPs practising in urban and semi-rural areas were invited to participate in the study. Each doctor participant was interviewed and asked to identify and contact one or two patients with a long-term condition, with whom they considered they had an ongoing relationship. These patients were then invited to be interviewed by a different researcher.

### Recruitment and sampling

Seven GPs agreed to be interviewed after an email was sent to all 37 GPs, who had been in practice for over 5 years in a semi-rural area of North Derbyshire. In urban Manchester, 11 GPs were invited to participate by email; eight agreed to be interviewed. Responders to the initial email received invitations and information sheets followed by email/telephone contact to obtain preliminary verbal consent. Semi-structured interviews were conducted with written consent at responders' practices.

Patients were recruited by the GPs who had been interviewed. After having been contacted initially by the GPs and giving verbal consent to be approached by researchers, patients were sent

an invitation letter and response slip, information sheet, and reply-paid envelope. Once the response slip had been returned, patients were contacted by telephone to obtain preliminary verbal consent. Semi-structured interviews took place in either responders' homes or their GP surgery. Every patient invited by their GP (11 in total) agreed to participate.

### Data collection and analysis

Data were collected in the spring and summer of 2011. Interviews were audiotaped with consent. Interview topic guides were developed by the authors through discussion, taking account of previous work<sup>21,22</sup> and relevant literature. The doctor interview topic guide included questions exploring GPs' views on managing people with long-term conditions, and the use of touch in consultations. Patient interview topics included their understanding and experiences of an ongoing doctor–patient relationship, focusing primarily on the use of non-verbal communication and touch in the context of medical interactions.

Prompts allowed discussion about the topic guide, but enabled broader dialogue to develop. Interviews were transcribed to form the data that were subject to analysis. Transcripts were coded, indexed, and analysed according to the constant comparative method of Strauss and Corbin.<sup>23</sup> Initial transcript analysis was undertaken independently by the authors, and categories were agreed through discussion; interview schedule modification was allowed as new themes emerged. Recruitment continued until category saturation was reached. Tapes were deleted after transcription, and transcripts were anonymised.

## RESULTS

Fifteen GPs and 11 patients were interviewed; demographics are given in Tables 1 and 2. Three overall themes were identified in the data analysis reported in this article:

- communication (verbal and non-verbal) in ongoing doctor–patient relationships;
- communicating using touch; and
- limits to the use of touch.

Illustrative data are identified by GP (doctor) or P (patient) and interview number.

### Communication in ongoing doctor–patient relationships

In the context of long-term conditions,

**Table 1. Demographic details of GP responders**

Participant reference	Sex	Ethnicity	Years qualified as GP	Practice locality	List size	Teaching practice?	Particular interests
GP1	Male	Mixed	25	Suburban	6000	Yes	Cardiology, diabetes, chronic kidney disease
GP2	Female	Chinese	29	Urban	3300	Yes	Medicines management
GP3	Male	White British	14	Urban	6200	Yes	–
GP4	Female	Chinese	7	Rural	8600	Yes	Diabetes
GP5	Male	White British	25	Suburban	7000	Yes	NHS management
GP6	Male	White British	26	Semi-rural	8200	Yes	Cardiovascular, diabetes
GP7	Male	White British	GP registrar	Suburban	7500	Yes	Research
GP8	Male	White British	10	Rural	8500	Yes	–
GP9	Male	White British	19	Urban	3350	Yes	A&E
GP10	Male	Bulgarian	1	Urban	3300	Yes	Diabetes
GP11	Female	White British	22	Semi-rural	8100	Yes	–
GP12	Female	White British	29	Semi-rural	11 000	Yes	Women's health
GP13	Female	White British	14	Urban	6500	Yes	Research
GP14	Male	White British	24	Rural	3500	No	–
GP15	Male	White British	37	Semi-rural	11 000	Yes	Asthma, COPD, minor operations

A&E = accident and emergency. COPD = chronic obstructive pulmonary disease

both patients and doctors described the importance of communication within established doctor–patient relationships, emphasising the value of patients consulting familiar doctors, who accompanied them on their illness journey:

*'That's important ... seeing the same doctor. I mean when you've got a long-term illness you don't really want to be going to a different doctor all the time. It's important because they know your history, and you can't really summarise ... it's been since 1989 this has been going on in one form or another ...'* (P 10)

*'Continuity is very useful for us because if you're forever seeing people that you've never met before, then you're having to go through all the history to make an informed decision about things. It just doesn't work, you can't do it in 10 minutes ... And also you're not able to offer that overall holistic approach to somebody because you don't know a lot about their social setup and their circumstances.'* (GP 8)

For patients, a sense of partnership, built on trust and working together, combined with good listening and explaining skills (both verbal and non-verbal), enhanced both personal care and validation of health concerns:

*'They seem to care ... you can get some that are quite brisk, and give you details matter of fact, but ... both of these listen and when they're explaining things they look at you and make sure you understand, they talk to you as if ... it's personal.'* (P 3)

Patients described non-verbal empathic listening as particularly important, providing encouragement at the start of the consultation. A sense of welcoming and an attentive manner with good eye contact and space to talk was also important:

*'I think they've got very good non-verbal cues ... they're not writing a prescription when you come in or distracted or constantly looking at the screen or at a watch ... they're very focused ... and they're very interested in what you have to say.'* (P 4)

#### Communicating using touch

Using touch was suggested to improve communication quality for all patient responders and for most GPs. Some GPs said it showed an empathic and helpful 'instinctive' (GP 11) response, or was 'a human thing to do' (GP 13):

*'[Being touched made me feel ...] that they understood, but that they really understood, they weren't just going through the motions of saying "I understand". You get some GPs*

**Table 2. Demographic details of patient participants**

Patient	Sex	Location	Age group, years	Ethnicity	Employment status	Highest qualification	Self-reported health problems
1	Female	Urban	50–59	White British	Unemployed	A-levels, University degree	Hemiplegic migraine, thyroid cancer, cardiomegaly, depression, asthma
2	Female	Rural	≥80	White British	Retired	A-levels	Osteoarthritis, pulmonary embolism
3	Female	Urban	60–69	White British	Retired	Nursing diploma	Sciatica
4	Male	Urban	50–59	White British	Retired due to ill health	A-levels	Rheumatoid arthritis, asthma, eczema, diabetes, anxiety and depression
5	Female	Urban	70–79	White British	Retired	No formal qualifications	Hypothyroidism, osteoporosis
6	Male	Urban	60–69	White British	Retired	A-levels; counselling supervision diplomas	Chronic fatigue syndrome, chronic epididymitis orchitis
7	Male	Rural	60–69	White British	Retired	GCSEs	Chronic neurological condition, migraines, arthritis, hypertension, bowel condition
8	Male	Urban	70–79	White, other	Retired	No formal qualifications	Myeloma, bladder cancer, asthma
9	Male	Urban	≥80	White British	Retired	No formal qualifications	Prostate cancer, partial hearing loss
10	Male	Rural	60–69	White British	Retired	No formal qualifications	Immunological problems (occupational allergies), atrial fibrillation, migraines, gut problems
11	Male	Rural	50–59	White British	Employed part time	Master's degree	Anxiety, atrial fibrillation

*that say “yes I understand” and you can tell by the voice, they’re going through the motions — these don’t.* (P 1)

*‘Even if it’s just putting a hand out ... I think touch, often it can say much more than words, it can be very reassuring.’* (P 4)

*‘If somebody’s crying, then not saying anything and resting a hand on their arm, showing that you’re there in that moment with them through touch, I think, is very therapeutic and is acceptable.’* (GP 7)

Using touch was reported by GPs to signify politeness, welcoming, and warmth, helping to make the clinical encounter more relaxed, especially handshaking as a greeting at the beginning or farewell at the end of a consultation:

*‘A little frail, old lady who’s had to lie down for me to examine her abdomen, I will just help her sit up and steady her or hold her stick out, help her put her coat back on ... I think, first of all, you’re a human being, the same as you would do helping somebody at home or cross the street or whatever. Your first thing is that you’re a human and not a machine.’* (GP 13)

Most GPs clearly distinguished between expressive and procedural touch. Touching as part of a clinical task was noted as helpful, reassuring, and often both procedural and expressive. GP responders felt that was a particularly appropriate form of touch and was a way of avoiding concerns about intimacy, which might otherwise have been a barrier:

*‘You’re performing a practical task for them to help them, other than just trying to comfort them. And, although it may be helpful, you know, in a way it’s reassuring to them ... because it’s a task you’re achieving isn’t it? You’re doing something to help them. You’re helping them with a task, you’re not just making physical contact with them.’* (GP 11)

*‘I’d had an examination and he said something once and touched me on the shoulder ... I suppose it’s just a sign of trying to put your mind at rest isn’t it?’* (P 10)

#### Limits to the use of touch

Factors influencing with whom expressive touch was used were age, sex, and end-of-life or bereavement situations. GPs reported a lower threshold for using touch

with older patients or those who were bereaved, and with patients who were the same sex as themselves. Male and female patients described feeling less comfortable with touch from male GPs:

*'I think I would be more cautious [touching a patient] if it was a woman and if it was a young woman. I really wouldn't want to be put in the situation of being accused of touching a woman.'* (GP 15, male)

*'I'd be a bit embarrassed if a man hugged me, because I'm an ex-serviceman. You can imagine.'* (P 9)

*'[Older people] respond, or seem to benefit from, skin to skin. Just holding hands while you talk about how they're feeling, particularly.'* (GP 2)

Where people can be touched by their GP was clear from patient responders; all felt that touch on the hand or forearm was acceptable, but not elsewhere. GPs described limits to the use of touch. For some, the use of anything other than purely procedural touch had situational limits and was infrequent:

*'I wouldn't do it [touch] willy nilly — it would be very selective ... It would be people that I had known a long time and I'd established a relationship [with], and I know that that wouldn't be taken inappropriately. I wouldn't do it with somebody I didn't know, I'd be very careful about that.'* (GP 15)

This contrasted with the majority of patient responders, who believed touch would be well received, especially in situations of distress:

*'Touch can say much more than words, it can be very reassuring, for a lot of people it can be the only recognition they have ... for me ... it's important because it's a connection. Probably it's important for most patients [depending] what the situation requires.'* (P 4)

Some doctors reflected that their personality precluded using touch, with many describing maintaining a boundary between themselves and patients:

*'I'm not a touchy-feely sort of person.'* (GP 8)

*'Touching ... I'm just aware there has to be a professional boundary.'* (GP 4)

All GP responders feared

misinterpretation or 'getting it wrong' (GP 1) when using touch:

*'You have to be careful with it. You don't want it to be misconstrued so I wouldn't take it further, I wouldn't go giving hugs or, you know. I might do a pat on the hand but I wouldn't reach across and give them a big hug. So I do think physical contact is important but you do have to be slightly aware of what you're doing.'* (GP 13)

*'I almost never use physical contact, because I think it can be misinterpreted. You're putting yourself at risk of something being misinterpreted, so I strongly avoid it.'* (GP 5)

However, no patient or doctor responders divulged any personal experiences when touch had seemed inappropriate. Patients acknowledged such fears but some felt these concerns should not be a barrier to using touch:

*'I think that it's a very grey area because it can be misconstrued by people and I think it's something that can only develop or can only happen if the doctor and the patient have a trusting relationship and also are aware of the boundaries ... It's a dangerously grey area.'* (P 4)

*'If he was a strange doctor I would think, "Well he's a strange doctor to me, but what a nice doctor he is, he's got sympathy". No I wouldn't think anything bad.'* (P 5)

## DISCUSSION

### Summary

Doctors valued procedural touch as appropriate and often also therapeutic; it was considered to be a reassuring practical process, such as helping someone up from the examination couch. Touch at the beginning or end of a consultation (handshaking, greeting, helping with coat) was seen to signify politeness and warmth. GPs reported a lower threshold for using expressive touch with older patients, patients of the same sex as themselves, and when dealing with end-of-life situations. Patients of both sexes were less comfortable with touch from a male GP, but most GPs and patients were comfortable with touch with someone they knew well. Patient responders noted that being unfamiliar with the doctor should not act as a barrier to expressive touch, especially in situations of severe distress.

Most patient responders believed expressive touch to be positive. A few

doctors reported never using anything other than procedural touch, citing reasons of their own personality or concern about professional boundaries; other GPs reported using expressive touch frequently in their consultations. Patients and doctors alike acknowledged the possibility of 'getting touch wrong', although none reported involvement in such a situation. Most patients were keen that these fears should not prevent the use of expressive touch by doctors in consultations.

### Strengths and limitations

This study is the first to investigate using touch within ongoing doctor–patient relationships from both patients' and GPs' perspectives. Using semi-structured interviews for data collection, rather than focus groups or questionnaires, enabled responders to divulge private accounts, which might not have emerged in group or written responses. Sampling in both urban and semi-rural locations enabled recruitment of a varied participant group. Nevertheless, participant variability was restricted as all patient participants were aged >50 years, and most GPs and all patients were white British or of other white origin. This limits this study's relevance to other age groups and ethnic/linguistic backgrounds.

Patient recruitment relied on GPs inviting suitable patient participants with long-term conditions, with whom they had an ongoing relationship and some GPs did not wish to invite their patients to participate. In addition, although category saturation of data was achieved, the fact that the sample was small, from one geographical area and, mostly, from teaching practices limits the conclusions that can be drawn from the data.

All GPs were from north-west England and known personally to one of two of the researchers: it is possible they may have shared similar views to these researchers or were more cautious of what they said as a result of being acquainted, and so may have given 'public accounts' rather than sharing more personal thoughts. There is also a possibility that GP responders viewed the interviewers, who were medical students at the time, as someone they needed to educate, and so did not fully open up or give truly honest answers.<sup>24</sup> Responders may also have been worried about the implications of what they were saying, given that issues around touch are so often misconstrued; GPs are all too aware of the potential for litigation in this area and several responders made comments regarding this.

### Comparison with existing literature

Non-verbal communication is recognised as significant in medical consultations, patient satisfaction, adherence, and clinical outcome.<sup>4,12</sup> These results support previous work that non-verbal communication is an important factor by which patients describe and evaluate their interactions with their GP.<sup>10,12</sup> Similarly, these data demonstrate that both patients with long-term conditions and their doctors value interpersonal skills such as listening, empathy, and trust, along with continuity of care, as has been noted elsewhere.<sup>25–27</sup> Most doctors noted the empathic use of touch throughout the interaction as instinctive, human, and acceptable. For the patient responders, touch improved empathic clinician–patient communication by enhancing a feeling of being 'really understood'. This emphasis suggests that touch enhances the 'genuineness' of the doctor's contribution to the interaction;<sup>28</sup> for Rogers and Stevens, such congruence — 'without "front" or façade' to obstruct communication — is a fundamental essential of listening,<sup>28</sup> which may also prove protective when patients are in emotional danger<sup>17</sup> and offer a tool to reduce anxiety and stress.<sup>29</sup>

The well-established distinction, noted earlier, between procedural and expressive touch<sup>13,20</sup> was affirmed by all the responders, both doctors and patients, who found expressive touch in the 'stiff' context of a procedural task both reassuring and normalising. GPs, who otherwise might not use expressive touch, were able to use touch both expressively and procedurally in the context of a clinical task. Although some doctor responders were clearly consciously aware of this use of expressive touch, others were not. Such expressive touch is fundamental to human social intercourse<sup>30</sup> and these data support a previously described educational need for primary care clinicians to be aware of the importance of expressive touch during procedural interactions, and be able to use such touch appropriately.<sup>21</sup>

In line with the current findings, previous questionnaire evidence<sup>31</sup> suggests that patients feel touch is generally welcome and that it is appropriate to be touched on the forearm or hand. Although this conclusion must be seen in the limiting context that both patient populations studied had little ethnic diversity, it supports the suggestion from the nursing literature that patients perceive some zones, such as the arm and shoulder, to be safe for touching.<sup>32–33</sup> The nursing literature also reflects the sex–age factors in using expressive touch<sup>33</sup> that



were noted in this study's findings: touch by a female clinician is more acceptable than touch by a male, and doctors are generally more comfortable using touch with older patients than younger ones.

The limits to expressive touch noted in this study by some doctors are similar to the boundaries discussed in previous work on the perceptions of doctors<sup>21</sup> and patients.<sup>12</sup> However, these limits contrast with patients' reports in these data (touching as an important connection that is missed if absent) and elsewhere (patients 'would welcome their doctor's touch'<sup>31</sup>). The possible absence of expressive touch in a GP-patient interaction<sup>31</sup> would be clearly contrary to the overall views of patients identified in this study's data.

Similarly, doctors' concerns about invading patients' space without permission<sup>21</sup> are evident in the current study's data. Unlike previous work,<sup>31</sup> the patient responders did not appear to be concerned about this. This demonstrates the value of a qualitative study over a questionnaire.

Some GP responders reported that, although they prefer not to use expressive touch, they will actively vary this preference occasionally (near end of life, during periods of patient bereavement, or if they know a patient very well). This data echoes previous evidence<sup>21</sup> and is an approach supported by the patient responders. Being aware of the possibility of deliberately varying boundaries in this way is an educational option for GPs in training.

In Friedson's classic work, patients reported that doctors needed both technical competence and a clear interest in the patient, demonstrated by good communication.<sup>34</sup> External pressures on the delivery of health care have changed in the intervening half century, but the focus on good communication remains.

Expressive touch offers a tool to further improve doctor-patient communication which, these data suggest, is currently underutilised by many doctors.

### Implications for practice

This study has confirmed that patients are sensitive to the non-verbal communication skills of their GPs, including the use of expressive touch.<sup>12</sup> Raising doctors' awareness about the potential for consciously using expressive touch in consultations will provide GPs with another tool to improve doctor-patient communication. Such awareness-raising, during under- or postgraduate education, may allow exploration and understanding of doctors' personal limits in using both expressive touch and other non-verbal behaviours in professional interactions. Once limits are consciously understood, they can be varied as needed in clinical work: these data suggest that both patients and doctors will find this helpful, particularly where clinicians have previously been unaware of their boundaries.

Models of the consultation, such as the Calgary Cambridge framework,<sup>5</sup> are widely used in communication education but, generally, make little detailed reference to the use of expressive touch in clinical interactions. These data suggest that increased educational emphasis on the conscious use of expressive touch would enhance clinical communication and, hence, perhaps also improve patient wellbeing and care. Further research might also investigate the phenomenon in a wider geographical area, and take into account ethnic, cultural, age, and sex differences (for doctors or patients) in using expressive touch; it could also involve randomly recruited patients, who do not have long-term health problems.

---

### Funding

This study received no external funding.

### Ethical approval

Ethical approval was granted from the National Research Ethics Service (11/NW/0067) and the University of Manchester Committee on the Ethics of Research on Human Beings (11126). Research and development approval was granted from Derbyshire County (2011/017) and Manchester (2011/033) primary care trusts.

### Provenance

Freely submitted; externally peer reviewed.

### Competing interests

The authors have declared no competing interests.

### Acknowledgements

The authors thank all participants for their help.

### Discuss this article

Contribute and read comments about this article on the Discussion Forum: <http://www.rcgp.org.uk/bjgp-discuss>

## REFERENCES

1. Spence J. The need for understanding the individual as a part of the training and functions of doctors and nurses. [Speech delivered at a conference on mental health held in March 1949]. In: *The purpose and practice of medicine: selections from the writings of Sir James Spence*. London: Oxford University Press, 1960: 273–274.
2. Mead N, Bower P. Patient-centredness: a conceptual framework and review of the empirical literature. *Soc Sci Med* 2000; **51**(7): 1087–1110.
3. Allen J, Gay B, Crebolder H, *et al*; for The European Society of General Practice/Family Medicine (WONCA Europe). *The European definition of general practice/family medicine*. Barcelona: The European Society of General Practice/Family Medicine, 2002.
4. Kurtz S, Silverman J, Draper J. *Teaching and learning communication skills in medicine*. 2nd edn. Oxford: Radcliffe, 2005.
5. Kurtz S, Silverman J. The Calgary-Cambridge Referenced Observation Guides: an aid to defining the curriculum and organizing the teaching in communication training programmes. *Med Educ* 1996; **30**(2): 83–89.
6. Hargie O, Dickson D, Boohan M, Hughes K. A survey of communication skills training in UK schools of medicine. *Med Educ* 1998; **32**(1): 25–34.
7. Tate P. *The doctor's communication handbook*. 6th edn. Oxford: Radcliffe, 2009.
8. Von Fragstein M, Silverman J, Cushing A, *et al*. UK consensus statement on the content of communication curricula in undergraduate medical education. *Med Educ* 2008; **42**(11): 1100–1107.
9. Hall J, Harrigan J, Rosenthal R. Non-verbal behaviour in clinician-patient interaction. *Applied and Preventative Psychology* 1995; **4**(1): 21–35.
10. Roter D, Frankel R, Hall J, *et al*. The expression of emotion through nonverbal behaviour in medical visits. *Journal of General Internal Medicine* 2006; **21** Suppl 1: S28–34.
11. Bensing J, Verheul W, van Dulmen A. Patient anxiety in the medical encounter: a study of verbal and non-verbal communication in general practice. *Health Education* 2008; **108**(5): 373–383.
12. Marciniowicz L, Konstantynowicz J, Godlewski C. Patients' perceptions of GP non-verbal communication: a qualitative study. *Br J Gen Pract* 2010; **60**(571): 83–87.
13. Peloquin S. Helping through touch: the embodiment of caring. *Journal of Religion and Health* 1989; **28**(4): 299–322.
14. Weiss S. The language of touch. *Nurs Res* 1979; **28**(2): 76–80.
15. Jourard S. *Disclosing man to himself*. New York, NY: Van Nostrand Reinhold Company, 1968.
16. General Medical Council. *Tomorrow's doctors*. London: GMC, 2009.
17. Estabrooks C, Morse J. Toward a theory of touch: the touching process and acquiring a touching style. *J Adv Nurs* 1992; **17**(4): 448–456.
18. Edwards S. An anthropological interpretation of nurses' and patients' perceptions of the use of space and touch. *J Adv Nurs* 1998; **28**(4): 809–817.
19. Connor A, Howett M. A conceptual model of intentional comfort touch. *J Holist Nurs* 2009; **27**(2): 127–135.
20. Watson WH. The meaning of touch. *J Commun* 1975; **28**(2): 76–79.
21. Cocksedge S, May C. Doctors' perceptions of personal boundaries to primary care interactions: a qualitative investigation. *Commun Med* 2009; **6**(2): 109–116.
22. Cocksedge S, Greenfield R, Nugent G, Chew-Graham C. Holding relationships in primary care: qualitative exploration of doctors' and patients' perceptions. *Br J Gen Pract* 2011; DOI: 10.3399/bjgp11X588457.
23. Strauss A, Corbin J. *Basics of qualitative research. Techniques for developing grounded theory*. Thousand Oaks, CA: Sage, 1998.
24. Chew-Graham C, May C, Perry M. Qualitative research and the problem of judgement: lessons from interviewing fellow professionals. *Fam Pract* 2002; **19**(3): 285–290.
25. Lewis R. Patients' views on quality of care in general practice: literature review. *Soc Sci Med* 1994; **39**(5): 655–670.
26. Williams S, Calnan M. Key determinants of consumer satisfaction with general practice. *Fam Pract* 1991; **8**(3): 339–348.
27. Mercer S, Watt G, Reilly D. Empathy is important for enablement. *BMJ* 2001; **322**(7290): 865.
28. Rogers C, Stevens B. *Person to person: the problem of being human*. London: Souvenir Press, 1973: 9.
29. Montagu A. *Touching: the human significance of the skin*. New York, NY: Columbia University Press, 1971.
30. Aulton N. *Touch: an exploration*. London: Darton, Longman & Todd, 1989.
31. Singh C, Leder D. Touch in the consultation. *Br J Gen Pract* 2010; DOI: 10.3399/bjgp12X630133.
32. Jourard S. An exploratory study of body-accessibility. *Br J Soc Clin Psychol* 1966; **5**(3): 221–231.
33. McCann K, McKenna H. An examination of touch between nurses and elderly patients in a continuing care setting in Northern Ireland. *J Adv Nurs* 1993; **18**(5): 838–846.
34. Friedson E. *Patients' views of medical practice*. New York, NY: Russell Sage, 1961: 57.